

R E M A R K S

Reconsideration of the above-identified application is respectfully requested in view of the foregoing amendments and the following remarks.

This invention is a rescue flotation buoy integrated with a pressurized containment and dispensing device containing a pressurized repellent for sharks. The invention is designed to utilize sodium lauryl sulfate, a well-known shark repellent, as one such repellent material. Additionally, the invention is designed specifically so that multiple ejections of the repellent can be made in order to sufficiently repel a shark attack in a rescue situation.

Claims 11 and 12 were rejected under 35 U.S.C. §102(b) as being anticipated by GB 2 176 732 A. The Examiner states "GB 732 discloses a shark repellent apparatus comprising dispensing means 151 for serially dispensing multiple applications of repellent material." Multiple applications of specific repellent materials, including sodium lauryl sulfate, would require a significantly larger storage chamber. In fact, even one application of sodium lauryl sulfate would require more storage capacity than can be provided by a chamber within the handle of a dive knife. Unlike possible odor-based shark repellents that might create a sufficient odor cloud with a very small volume of repellent, sodium lauryl sulfate acts as a repellent by

irritating the surface of the gills of a shark. A much greater volume of the sodium lauryl sulfate shark repellent is required to have this effect, than the volume of a possible odor based repellent. In the attached scientific publication entitled *Surfactants as chemical shark repellents: past, present, and future*, it is stated that sodium dodecyl sulfate (a synonym for sodium lauryl sulfate) "does not meet the Navy's potency requirement for a nondirectional surrounding-cloud type repellent of 100 parts per billion." (Sisneros 1) Later it is stated that "surfactants are an order of magnitude less effective than the target concentration needed for a practical [nondirectional cloud-type] repellent." (Sisneros 10) To be effective, it is clear that a device that provides multiple applications and significantly more volume would be required. Since GB 2 176 732 A could not contain enough volume of a surfactant to be effective, it is believed that GB 2 176 732 A does not anticipate the invention, and the rejection of claim 11 of the present invention has been overcome. Therefore, Applicant respectfully traverses the rejection of claim 11 under 35 U.S.C. §102(b) as being anticipated by GB 2 176 732 A.

Claims 1 and 2 were rejected under 35 U.S.C. §102(c) as being unpatentable over ILER in view of GB 2 176 732 A. Examiner Basinger states, "GB 732 discloses a pressurized repellent material containment and dispensing device having a proximal end and a distal end for serially dispensing multiple applications of a repellent material." Again, GB 2 176 732 A, Divers Knife, does not have the storage

capacity in a knife handle to dispense even a single application of substances such as sodium lauryl sulfate with any hope of effectively repelling sharks, as described hereinabove.

Examiner Balinger concludes that it would be obvious to "provide a buoy of ILER with a knife similar to that of GB 732." This, however, would not be effective if a surfactant repellent is used. A bouy of ILER, combined with a knife of GB 2 176 732 A would therefore have an inherently different effect than described by Applicant in that it would not be able to supply sufficient repellent of the surfactant type, irritating the surface of the gills of a shark, to effectively repel the shark.

Furthermore, a buoy of ILER would require the knife of GB 2 176 732 A to be stored within a storage chamber that is accessible by unscrewing a threaded lid. This combination would severely hinder the accessibility of attaining the knife within the buoy. In many rescue situations, there would be no time to unscrew a lid, find the knife, and use the knife all while trying to keep water out of the buoy's compartment. The invention disclosed by Applicant would not contain this flaw. Since it is believed that the objection to claim 1 of the present invention has been overcome, Applicant respectfully traverses the rejection of claim 1 under 35 U.S.C. §103(a) as being anticipated by ILER in view of GB 2 176 732 A.

Claims 3-6 were rejected under 35 U.S.C. §103(a) as being unpatentable over ILER and GB 2 176 732 A and further in view of SCHNEIDER. As described hereinabove, the shark repellent device used by GB 2 176 732 A cannot be coupled with the shark material disclosed by SCHNEIDER with any effectiveness to repel a shark because of the insufficient volume provided by GB 2 176 732 A. Since it is believed that the objection to claim 1 of the present invention has been overcome, Applicant respectfully traverses the rejection of claims 4-6 under 35 U.S.C. §103(a) as being anticipated by ILER in view of GB 2 176 732 A.

Claim 13 was rejected under U.S.C. §103(a) as being unpatentable over GB 2 176 732 A in view of SCHNEIDER. This claim has been withdrawn.

Claims 7, 8 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over SABO in view of KEA and GB 2 176 732 A. If one were to "provide in the pocket or container for shark repellent of SABO a knife similar to that of GB 2 176 732 A," as described by the Examiner, the resulting combination would result in a far different repellent method. Once again, a repellent such as sodium lauryl sulfate would not be able to be used in the combination of SABO, KEA, and GB 2 176 732 A. However, this repellent has been demonstrated to work in Applicant's invention. Since it is believed that the objection to claim 7 of the present invention has been overcome, Applicants respectfully traverse the rejection of claims 7,

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8 and 10 under 35 U.S.C. §103(a) as being anticipated by
SABO in view of KEA and GB 2 176 732 A.

Claim 9 was also rejected under 35 U.S.C. §103(a) as
being unpatentable over SABO, KEA and GB 2 176 732 A as
applied to claim 7, and further in view of SCHNIEDER. This
claim has been withdrawn.

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In view of the foregoing amendments and remarks,
Applicants respectfully request that claims 1, 4 - 8, and
10 - 11 be allowed and the application be passed to issue.

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